

TABLE VI.C.1.—NUTRIENT COST-EFFECTIVENESS: NITROGEN—Continued

Subcategory, sector, and option	Pre-tax annualized costs (\$2001)	Nitrogen removals (lb)	Cost-effectiveness (\$2001/ pound)	
			Average	Incremental
Commercial Recirculating				
Option 1	\$2,784	0	2	2
Option A	7,744	0	2	2
Option B	7,744	0	2	2
Option 2	7,744	0	2	2
Option 3	7,744	0	2	2
Non-Commercial Recirculating				
Option A	\$17,594	0	2	2
Option 1	44,268	115	385	232
Option B	55,107	115	480	NA
Option 2	59,558	115	518	NA
Option 3	80,965	443	183	112

NA: The option higher costs, not related to nutrient removal, and equal removals compared to previous options.

¹ Option A is incremental to baseline, so the average and incremental values are the same.

² Undefined: Option costs are costs for BMP components that address invasive species, drugs, and chemicals that have no effect on nutrients, or facilities in these groups have adequate treatment to achieve requirements for pollutants in this table (*i.e.*, no incremental removals are estimated).

Table VI.C.2 presents the results for phosphorus by production system, commercial and non-commercial sector, and option. For commercial flow-through facilities, the average cost-effectiveness for phosphorus is \$131/lb for Option A; the average cost-effectiveness ranges from \$41/lb to \$81/lb for the other options. Incrementally, the effects of the different BMP requirements result in Options B, 1, and 2 having the same removals but different costs. The incremental calculations are based on the option

with the lowest of the three costs (*e.g.*, Option 1), and the incremental cost-effectiveness is estimated to be roughly \$34/lb to \$35/lb. Nutrient cost-effectiveness values are higher for non-commercial facilities. The average cost-effectiveness for phosphorus is \$925/lb for Option A and ranges from \$112/lb to \$258/lb for the other options. Again, the incremental calculations are based on the option with the lowest of the three costs (*e.g.*, Option 1) with the same removals and ranges from \$77/lb to \$121/lb.

For commercial recirculating facilities, the average and incremental cost-effectiveness for phosphorus is undefined for commercial because no phosphorus is removed. For non-commercial recirculating facilities, no phosphorus removals are seen for Option A. For the remaining options, average cost effectiveness ranges from \$481/lb to \$2,987/lb and incremental cost-effectiveness ranges from \$247/lb to \$1,338/lb.

TABLE VI.C.2.—NUTRIENT COST-EFFECTIVENESS: PHOSPHORUS

Subcategory, sector, and option	Pre-tax annualized costs (\$2001)	Phosphorus removals (lb)	Cost-effectiveness (\$2001/pound)	
			Average	Incremental
Commercial Flow-Through				
Option A	\$213,030	1,631	\$131	\$131 ¹
Option 1	344,350	5,396	64	35
Option 2	429,441	5,396	80	NA
Option B	438,443	5,396	81	NA
Option 3	920,663	22,290	41	34
Non-Commercial Flow-Through				
Option A	\$1,492,671	1,614	\$925	\$925 ¹
Option 1	2,692,963	11,510	234	121
Option B	2,968,001	11,510	258	NA
Option 2	2,969,498	11,510	258	NA
Option 3	5,799,459	51,976	112	77
Commercial Recirculating				
Option 1	\$2,784	0	2	2
Option A	7,744	0	2	2
Option B	7,744	0	2	2
Option 2	7,744	0	2	2
Option 3	7,744	0	2	2